

EPCA Inventory Fact Sheet

Title: *Scientific Inventory of Onshore Federal Lands' Oil and Gas Resources and Reserves and the Extent and Nature of Restrictions or Impediments to Their Development*

What it is: A study prepared at the request of Congress under a provision of the 2000 Energy Policy and Conservation Act (EPCA) by the U.S. Department of the Interior's Bureau of Land Management and U.S. Geological Survey, the Department of Agriculture's U.S. Forest Service, and the Department of Energy's Office of Fossil Fuels and Energy Information Administration (EIA).

Area the study addresses: Five basins in the West that contain the bulk of the natural gas resource and much of the oil resource under public ownership in the onshore United States:

- the Paradox-San Juan Basin (Colorado, New Mexico, and Utah)
- the Uinta-Piceance Basin (Colorado and Utah)
- the Greater Green River Basin (Colorado, Utah, and Wyoming)
- the Powder River Basin (Montana and Wyoming), and
- the Montana Thrust Belt (Montana).

What the EPCA inventory does: The EPCA inventory provides estimates of undiscovered technically recoverable resources and proved reserves of oil and gas beneath the five basins and an inventory of the extent and nature of limitations to their development. The report does not make any policy recommendations in response to its findings.

Source of resource figures: The oil and gas figures are based on U.S. Geological Survey (USGS) estimates of undiscovered technically recoverable resources and Energy Information Administration (EIA) proved reserve calculations.

Analyzing constraints on development:

All oil and gas leases are governed by statutory and regulatory requirements. These requirements can have many purposes ranging from the protection of environmental, social, historical, or cultural resources or values to the payment of rents and royalties.

The analysis of constraints to development centered on two factors that affect access to oil and gas resources on Federal lands:

- whether the lands are open or closed to leasing, and
- the degree of constraint to development resulting from lease stipulations on open lands.

The EPCA inventory groups approximately 1,000 different lease stipulations that the land managing agencies apply in the five basins studied into 10 categories of restrictions. The resulting 10 categories of restrictions, which include the complete range of access restrictions associated with oil and gas leasing in the five basins, fall into three broad levels of constraint:

1. lands where leasing is permitted under standard stipulations
2. lands where leasing is permitted with increasing limitations on access, principally seasonal occupancy restrictions, and
3. lands where oil and gas leasing is prohibited.

The analysis also included consideration of exceptions to stipulations granted after a review of on-the-ground conditions and the use of modern technologies such as directional drilling.

RESULTS OF THE EPCA INVENTORY

The results of the EPCA Inventory analyses are summarized by access category for land area and resources. Tables show the results for land access categorization for land area, total liquids (oil, natural gas liquids, and liquids associated with gas reservoirs), and total natural gas (associated and non-associated). Total liquids and total natural gas comprise undiscovered technically recoverable resources and proved reserves. The results are presented cumulatively for the entire study area and then separately for each of the five basins. The following notes apply to all of the tables and figures:

- The USGS reports the volume of undiscovered oil and natural gas using a range of likelihoods (or percentages) that a certain volume of oil and natural gas is present. These estimates range from a 5% chance for a large volume to a 95% chance for a small volume of oil and/or natural gas to occur. The USGS also calculates mean values of all the possible likelihoods and volumes. The values for undiscovered technically recoverable resources used in the tables and figures are based on those mean values together with the EIA proved reserves.
- A continuous accumulation of oil or natural gas is one that is located throughout a large area and lacks a discrete geological border or closure, e.g., coalbed natural gas.
- Split-estate lands are those lands where the surface rights belong to non-Federal entities (e.g., private individuals or state governments) but the subsurface mineral rights are publicly held and managed by the Federal government.

CUMULATIVE RESULTS FOR ALL FIVE BASINS

- Total area of Federal lands, including split estate: 59.4 million acres
- Total estimated reserves and undiscovered technically recoverable oil: 3.9 billion barrels (Bbbl)
- Total estimated undiscovered technically recoverable natural gas: 138.5 trillion cubic feet (Tcf)

Total Available for Leasing With Standard Stipulations:

- Area: 23.1 million acres (39% of the total study area)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 2.2 Bbbl of oil (57% of the reserves and undiscovered technically recoverable oil in the study area)
 - 86.6 Tcf of natural gas (63% of the reserves and undiscovered technically recoverable natural gas in the study area)

Total Available for Leasing With Restrictions on Oil and Gas Operations Beyond Standard Stipulations:

- Area: 15.2 million acres (25% of the total study area)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 1.1 Bbbl of oil (28% of the reserves and undiscovered technically recoverable oil in the study area)
 - 36.0 Tcf of natural gas (25% of the reserves and undiscovered technically recoverable natural gas in the study area)

Total Not Available for Leasing:

- Area: 21.2 million acres (36% of the total study area)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 0.6 Bbbl of oil (15% of the reserves and undiscovered technically recoverable oil in the study area)
 - 15.9 Tcf of natural gas (12% of the reserves and undiscovered technically recoverable natural gas in the study area)

Summary of All EPCA Inventory Areas -- Oil and Natural Gas Affected by Access Categories

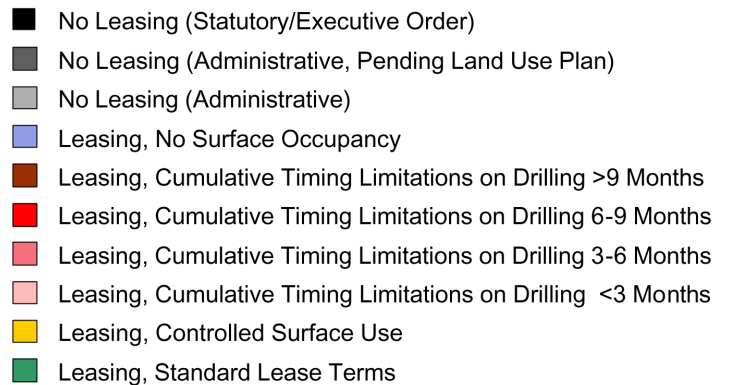
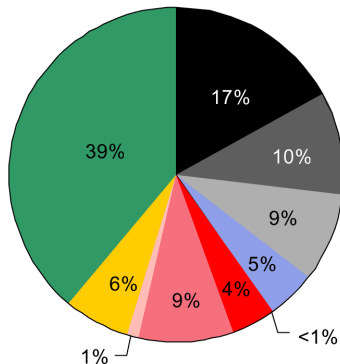
Level	Access Category	Area		Proved Reserves and Undiscovered Technically Recoverable Resources			
		(acres x1000)	Percent of Federal	Total Liquids*		Total Natural Gas**	
				(MMBbl)***	Percent of Federal	(Bcf)****	Percent of Federal
1.	No Leasing (Statutory/Executive Order)	10,068	17%	298	8%	9,035	7%
2.	No Leasing (Administrative, Pending Land Use Plan)	6,007	10%	116	3%	3,690	3%
3.	No Leasing (Administrative)	5,098	9%	182	5%	3,185	2%
4.	Leasing, No Surface Occupancy	2,714	5%	50	1%	3,120	2%
5.	Leasing, Cumulative Timing Limitations on Drilling >9 Months	25	0%	3	0%	114	0%
6.	Leasing, Cumulative Timing Limitations on Drilling 6-9 Months	2,521	4%	250	6%	5,549	4%
7.	Leasing, Cumulative Timing Limitations on Drilling 3-6 Months	5,442	9%	528	14%	20,401	15%
8.	Leasing, Cumulative Timing Limitations on Drilling <3 Months	697	1%	8	0%	733	1%
9.	Leasing, Controlled Surface Use	3,753	6%	221	6%	6,080	4%
10.	Leasing, Standard Lease Terms	23,091	39%	2,198	57%	86,566	63%
Total, Federal Lands Including Split Estate		59,416	100%	3,854	100%	138,472	100%
Total Non-Federal		44,256		2,455		87,668	
Total Study Area		103,672		6,309		226,141	

* Comprising oil, NGLs and liquids associated with natural gas reservoirs
** Comprising associated dissolved and nonassociated natural gas

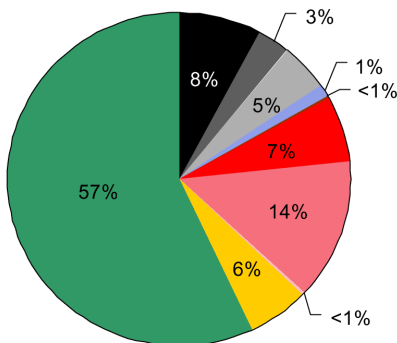
***MMBbl -- Millions of Barrels
****Bcf -- Billion cubic feet

Small rounding errors may be present

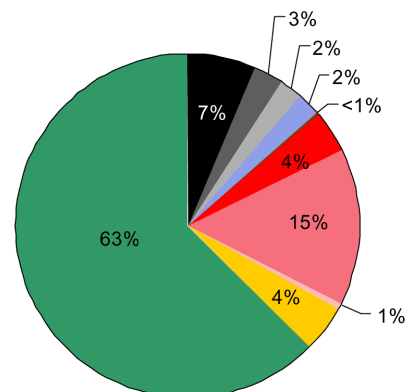
Percent of Federal and Split Estate Lands



Percent of Oil Resources



Percent of Natural Gas Resources



RESULTS FOR PARADOX/SAN JUAN BASIN (Colorado, New Mexico, and Utah)

- Area of Federal lands, including split estate: 17.6 million acres
- Most of the undiscovered natural gas (approximately 95%) is widely dispersed in continuous deposits rather than distinct structural traps.
- Most of the oil (52%) and natural gas (79%) are available under standard lease terms.
- Among the five study areas in the inventory, this area has the greatest proportion of proved natural gas reserves (28%) relative to undiscovered resources.

Available for Leasing With Standard Stipulations:

- Area: 6.0 million acres (6% of the basin)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 0.2 Bbbl of oil (52% of the undiscovered technically recoverable oil in the basin)
 - 28.9 Tcf of natural gas (79% of the reserves and undiscovered technically recoverable natural gas in the basin)

Available for Leasing With Restrictions on Oil and Gas Operations Beyond Standard Stipulations:

- Area: 1.6 million acres (9% of the basin)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 68 million barrels (MMbbl) of oil (16% of the reserves and undiscovered technically recoverable oil in the study area)
 - 6.3 Tcf of natural gas (17% of the reserves and undiscovered technically recoverable natural gas in the study area)

Not Available for Leasing:

- Area: 10.0 million acres (57% of the total study area)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 138 MMbbl of oil (32% of the reserves and undiscovered technically recoverable oil in the study area)
 - 1.2 Tcf of natural gas (3% of the reserves and undiscovered technically recoverable natural gas in the study area)

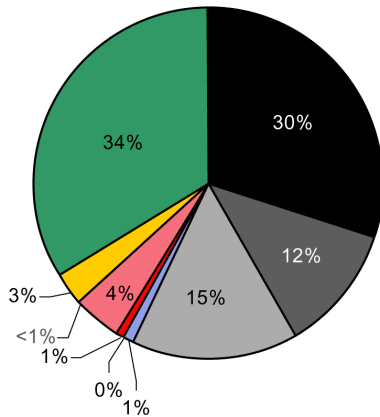
Paradox/San Juan Basin -- Oil and Natural Gas Resources Affected by Access Categories

Level	Access Category	Area		Proved Reserves and Undiscovered Technically Recoverable Resources			
		(acres x1000)	Percent of Federal	Total Liquids*		Total Natural Gas**	
				(MMBbl)***	Percent of Federal	(Bcf)****	Percent of Federal
1.	No Leasing (Statutory/Executive Order), (NLS)	5,309	30%	66	15%	540	1%
2.	No Leasing (Administrative), (NLA/LUP)	2,050	12%	4	1%	1	0%
3.	No Leasing (Administrative), (NLA)	2,690	15%	68	16%	647	2%
4.	Leasing, No Surface Occupancy (NSO)	196	1%	6	1%	67	0%
5.	Leasing, Cumulative Timing Limitations on Drilling >9 Months (TLs >9)	0	0%	0	0%	0	0%
6.	Leasing, Cumulative Timing Limitations on Drilling 6-9 Months (TLs 6-9)	95	1%	4	1%	402	1%
7.	Leasing, Cumulative Timing Limitations on Drilling 3-6 Months (TLs 3-6)	764	4%	33	8%	4,015	11%
8.	Leasing, Cumulative Timing Limitations on Drilling <3 Months (TLs <3)	23	0%	1	0%	10	0%
9.	Leasing, Controlled Surface Use (CSU)	542	3%	23	5%	1,789	5%
10.	Leasing, Standard Lease Terms (SLTs)	5,960	34%	224	52%	28,869	79%
Total, Federal Lands Including Split Estate		17,628	100%	430	100%	36,340	100%
Total Non-Federal		11,040		404		36,142	
Total Study Area		28,669		834		72,482	

* Comprising oil, NGLs and liquids associated with natural gas reservoirs
** Comprising associated dissolved and nonassociated natural gas

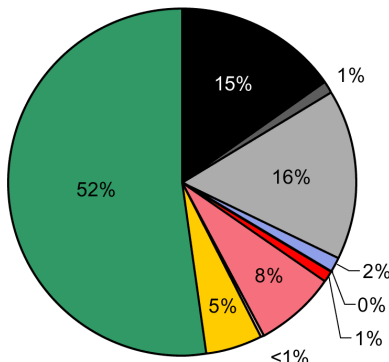
***MMBbl -- Millions of Barrels
****Bcf -- Billion cubic feet

Percent of Federal and Split Estate Lands

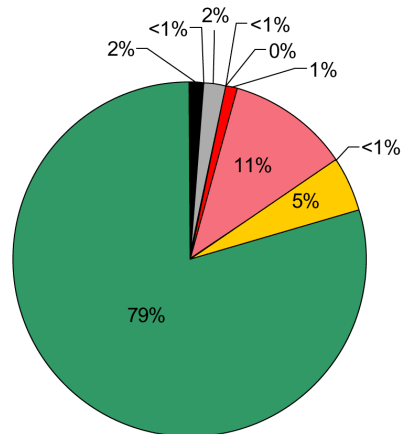


- No Leasing (Statutory/Executive Order)
- No Leasing (Administrative, Pending Land Use Plan)
- No Leasing (Administrative)
- Leasing, No Surface Occupancy
- Leasing, Cumulative Timing Limitations on Drilling >9 Months
- Leasing, Cumulative Timing Limitations on Drilling 6-9 Months
- Leasing, Cumulative Timing Limitations on Drilling 3-6 Months
- Leasing, Cumulative Timing Limitations on Drilling <3 Months
- Leasing, Controlled Surface Use
- Leasing, Standard Lease Terms

Percent of Oil Resources



Percent of Natural Gas Resources



RESULTS FOR UNTA/PICEANCE BASIN (Colorado and Utah)

- Area of Federal lands, including split estate: 13.7 million acres
- Most of the undiscovered natural gas (greater than 95%) is found widely dispersed in continuous deposits rather than distinct structural traps.
- Among the five study areas, this area has the highest percentage of oil (85%) available under standard lease terms. This is partly because most of the oil (63%) is proved reserves.
- Compared to the other four areas in this inventory, this area has the highest percentage of Federal lands (9%), as well as the natural gas (15%) resources designated within the "no surface occupancy" category.

Available for Leasing With Standard Stipulations:

- Area: 6.2 million acres (45% of the basin)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 186 MMbbl of oil (85% of the undiscovered technically recoverable oil in the basin)
 - 9.3 Tcf of natural gas (57% of the reserves and undiscovered technically recoverable natural gas in the basin)

Available for Leasing With Restrictions on Oil and Gas Operations Beyond Standard Stipulations:

- Area: 4.7 million acres (35% of the basin)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 19 MMbbl of oil (9% of the reserves and undiscovered technically recoverable oil in the study area)
 - 6.0 Tcf of natural gas (37% of the reserves and undiscovered technically recoverable natural gas in the study area)

Not Available for Leasing:

- Area: 2.7 million acres (20% of the total study area)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 14 MMbbl of oil (7% of the reserves and undiscovered technically recoverable oil in the study area)
 - 0.9 Tcf of natural gas (6% of the reserves and undiscovered technically recoverable natural gas in the study area)

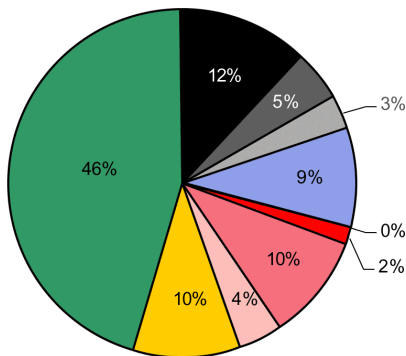
Uinta/Piceance Basin -- Oil and Natural Gas Resources Affected by Access Categories

Level	Access Category	Area		Proved Reserves and Undiscovered Technically Recoverable Resources			
		(acres x1000)	Percent of Federal	Total Liquids*		Total Natural Gas**	
				(MMBbl)***	Percent of Federal	(Bcf)****	Percent of Federal
1.	No Leasing (Statutory/Executive Order), (NLS)	1,661	12%	13	6%	661	4%
2.	No Leasing (Administrative), (NLA/LUP)	644	5%	1	1%	149	1%
3.	No Leasing (Administrative), (NLA)	419	3%	0	0%	81	1%
4.	Leasing, No Surface Occupancy (NSO)	1,268	9%	8	4%	2,433	15%
5.	Leasing, Cumulative Timing Limitations on Drilling >9 Months (TLs >9)	0	0%	0	0%	0	0%
6.	Leasing, Cumulative Timing Limitations on Drilling 6-9 Months (TLs 6-9)	238	2%	1	1%	86	1%
7.	Leasing, Cumulative Timing Limitations on Drilling 3-6 Months (TLs 3-6)	1,314	10%	4	2%	1,652	10%
8.	Leasing, Cumulative Timing Limitations on Drilling <3 Months (TLs <3)	538	4%	2	1%	585	4%
9.	Leasing, Controlled Surface Use (CSU)	1,381	10%	4	2%	1,232	8%
10.	Leasing, Standard Lease Terms (SLTs)	6,231	45%	186	85%	9,255	57%
Total, Federal Lands Including Split Estate		13,694	100%	220	100%	16,135	100%
Total Non-Federal		5,252		184		12,708	
Total Study Area		18,945		404		28,843	

* Comprising oil, NGLs and liquids associated with natural gas reservoirs
** Comprising associated dissolved and nonassociated natural gas

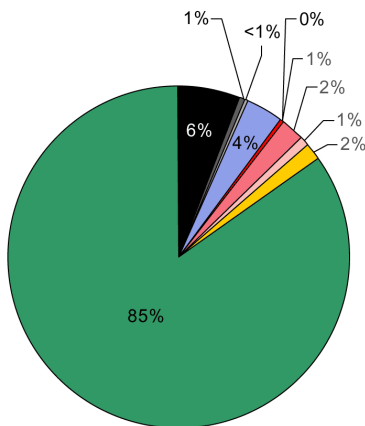
***MMBbl -- Millions of Barrels
****Bcf -- Billion cubic feet

Percent of Federal and Split Estate Lands

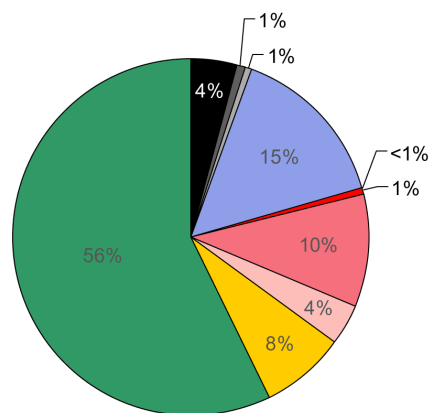


- No Leasing (Statutory/Executive Order)
- No Leasing (Administrative, Pending Land Use Plan)
- No Leasing (Administrative)
- Leasing, No Surface Occupancy
- Leasing, Cumulative Timing Limitations on Drilling >9 Months
- Leasing, Cumulative Timing Limitations on Drilling 6-9 Months
- Leasing, Cumulative Timing Limitations on Drilling 3-6 Months
- Leasing, Cumulative Timing Limitations on Drilling <3 Months
- Leasing, Controlled Surface Use
- Leasing, Standard Lease Terms

Percent of Oil Resources



Percent of Natural Gas Resources



RESULTS FOR GREATER GREEN RIVER BASIN (Colorado, Utah, and Wyoming)

- Area of Federal lands, including split estate: 11.6 million acres
- Almost all of the undiscovered natural gas (97%) is widely dispersed in continuous deposits rather than distinct structural traps.
- A relatively large portion of the Federal land (29% of the surface area) and 27% of the oil and 25% of the natural gas are under timing limitations of 3 to 9 months.
- Among the five inventory areas, this area has the greatest volume of oil (2.1 Bbbl) and natural gas (72 Tcf) under Federal lands.
- The land ownership pattern is highly complex due to a checkerboard pattern of ownership resulting from railroad grants.

Available for Leasing With Standard Stipulations:

- Area: 5.1 million acres (45% of the basin)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 1.2 Bbbl of oil (57% of the undiscovered technically recoverable oil in the basin)
 - 43.6 Tcf of natural gas (61% of the reserves and undiscovered technically recoverable natural gas in the basin)

Available for Leasing With Restrictions on Oil and Gas Operations Beyond Standard Stipulations:

- Area: 4.2 million acres (37% of the basin)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 635 MMbbl of oil (31% of the reserves and undiscovered technically recoverable oil in the study area)
 - 20.6 Tcf of natural gas (29% of the reserves and undiscovered technically recoverable natural gas in the study area)

Not Available for Leasing:

- Area: 2.2 million acres (19% of the total study area)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 258 MMbbl of oil (13% of the reserves and undiscovered technically recoverable oil in the study area)
 - 7.4 Tcf of natural gas (10% of the reserves and undiscovered technically recoverable natural gas in the study area)

Greater Green River Basin -- Oil and Gas Resources Affected by Access Categories

Level	Access Category	Area		Proved Reserves and Undiscovered Technically Recoverable Resources			
		(acres x1000)	Percent of Federal	Total Liquids* (MMBbl)***	Percent of Federal	Total Natural Gas** (Bcf)****	Percent of Federal
1.	No Leasing (Statutory/Executive Order), (NLS)	638	6%	135	7%	4,598	6%
2.	No Leasing (Administrative), (NLA/LUP)	461	4%	37	2%	702	1%
3.	No Leasing (Administrative), (NLA)	1,058	9%	86	4%	2,046	3%
4.	Leasing, No Surface Occupancy (NSO)	266	2%	12	1%	175	0%
5.	Leasing, Cumulative Timing Limitations on Drilling >9 Months (TLs >9)	8	0%	3	0%	107	0%
6.	Leasing, Cumulative Timing Limitations on Drilling 6-9 Months (TLs 6-9)	992	9%	110	5%	4,055	6%
7.	Leasing, Cumulative Timing Limitations on Drilling 3-6 Months (TLs 3-6)	2,369	21%	437	21%	14,117	20%
8.	Leasing, Cumulative Timing Limitations on Drilling <3 Months (TLs <3)	64	1%	4	0%	104	0%
9.	Leasing, Controlled Surface Use (CSU)	536	5%	69	3%	2,076	3%
10.	Leasing, Standard Lease Terms (SLTs)	5,159	45%	1,162	57%	43,565	61%
Total, Federal Lands Including Split Estate		11,551	100%	2,055	100%	71,546	100%
Total Non-Federal		5,033		832		25,747	
Total Study Area		16,583		2,887		97,293	

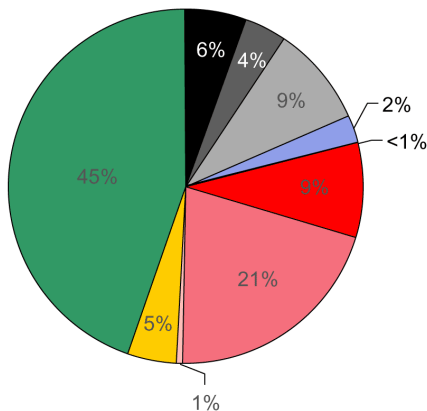
* Comprising oil, NGLs and liquids associated with natural gas reservoirs

** Comprising associated dissolved and nonassociated natural gas

***MMBbl -- Millions of Barrels

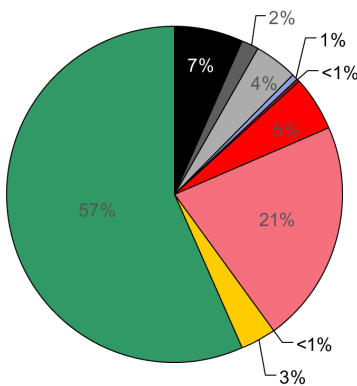
****Bcf -- Billion cubic feet

Percent of Federal and Split Estate Lands

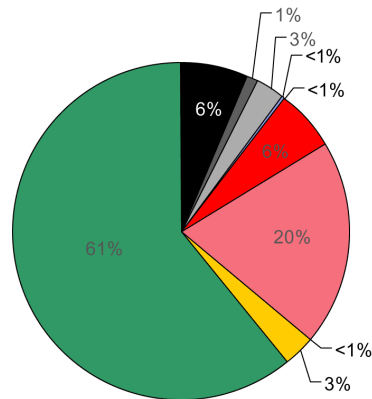


- No Leasing (Statutory/Executive Order)
- No Leasing (Administrative, Pending Land Use Plan)
- No Leasing (Administrative)
- Leasing, No Surface Occupancy
- Leasing, Cumulative Timing Limitations on Drilling >9 Months
- Leasing, Cumulative Timing Limitations on Drilling 6-9 Months
- Leasing, Cumulative Timing Limitations on Drilling 3-6 Months
- Leasing, Cumulative Timing Limitations on Drilling <3 Months
- Leasing, Controlled Surface Use
- Leasing, Standard Lease Terms

Percent of Oil Resources



Percent of Natural Gas Resources



RESULTS FOR POWDER RIVER BASIN (Montana and Wyoming)

- Area of Federal lands, including split estate: 10.7 million acres
- Almost all undiscovered natural gas is continuous coalbed natural gas (98%).
- Most of the Federal land (52%) and 63% of the oil and 59% of the natural gas are available under standard lease terms.
- Among the five inventory areas, this area has the highest proportion of Federal land (10%), 12 % of the oil, and 11% of the natural gas available under the controlled surface use category.
- Among the five inventory areas, this area has the highest proportion of split-estate lands (60% of Federal lands).

Available for Leasing With Standard Stipulations:

- Area: 5.5 million acres (52% of the basin)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 620 MMbbl of oil (63% of the undiscovered technically recoverable oil in the basin)
 - 4.8 Tcf of natural gas (59% of the reserves and undiscovered technically recoverable natural gas in the basin)

Available for Leasing With Restrictions on Oil and Gas Operations Beyond Standard Stipulations:

- Area: 3.7 million acres (35% of the basin)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 324 MMbbl of oil (33% of the reserves and undiscovered technically recoverable oil in the study area)
 - 2.6 Tcf of natural gas (32% of the reserves and undiscovered technically recoverable natural gas in the study area)

Not Available for Leasing:

- Area: 1.5 million acres (13% of the total study area)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 36 MMbbl of oil (4% of the reserves and undiscovered technically recoverable oil in the study area)
 - 0.8 Tcf of natural gas (9% of the reserves and undiscovered technically recoverable natural gas in the study area)

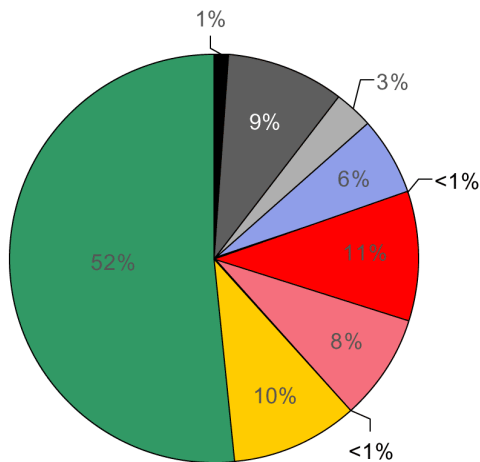
Powder River Basin -- Oil and Gas Resources Affected by Access Categories

Level	Access Category	Area		Proved Reserves and Undiscovered Technically Recoverable Resources			
		(acres x1000)	Percent of Federal	Total Liquids* (MMBbl)***	Percent of Federal	Total Natural Gas** (Bcf)****	Percent of Federal
1.	No Leasing (Statutory/Executive Order), (NLS)	109	1%	0	0.0%	26	0.3%
2.	No Leasing (Administrative), (NLA/LUP)	1,006	9%	17	1.7%	570	7.0%
3.	No Leasing (Administrative), (NLA)	335	3%	18	1.9%	165	2.0%
4.	Leasing, No Surface Occupancy (NSO)	644	6%	17	1.7%	178	2.2%
5.	Leasing, Cumulative Timing Limitations on Drilling >9 Months (TLs >9)	1	0%	0	0.0%	1	0.0%
6.	Leasing, Cumulative Timing Limitations on Drilling 6-9 Months (TLs 6-9)	1,122	10%	133	13.6%	961	11.8%
7.	Leasing, Cumulative Timing Limitations on Drilling 3-6 Months (TLs 3-6)	870	8%	52	5.3%	545	6.7%
8.	Leasing, Cumulative Timing Limitations on Drilling <3 Months (TLs <3)	3	0%	1	0.1%	4	0.1%
9.	Leasing, Controlled Surface Use (CSU)	1,092	10%	121	12.4%	884	10.8%
10.	Leasing, Standard Lease Terms (SLTs)	5,511	52%	620	63.3%	4,824	59.1%
Total, Federal Lands Including Split Estate		10,693	100%	979	100%	8,157	100%
Total Non-Federal		17,102		856		10,728	
Total Study Area		27,796		1,835		18,885	

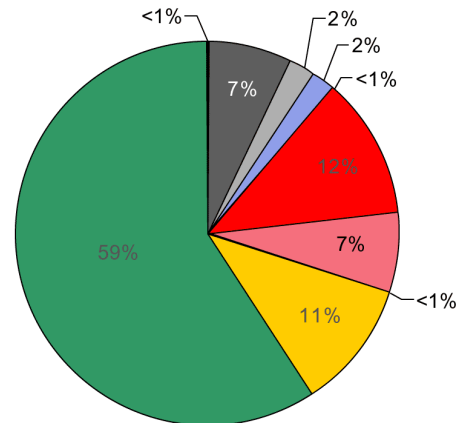
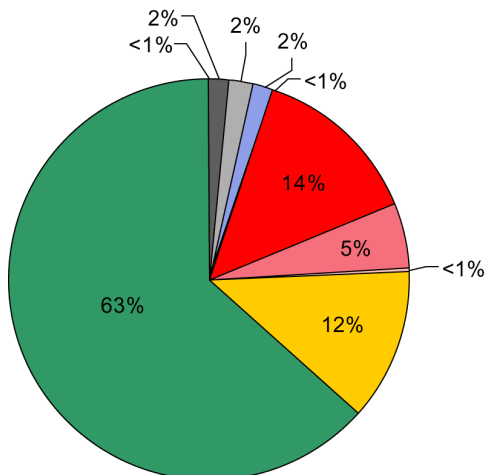
* Comprising oil, NGLs and liquids associated with natural gas reservoirs
 ** Comprising associated dissolved and nonassociated natural gas

***MMBbl -- Millions of Barrels
 ****Bcf -- Billion cubic feet

Percent of Federal and Split Estate Lands



- No Leasing (Statutory/Executive Order)
- No Leasing (Administrative, Pending Land Use Plan)
- No Leasing (Administrative)
- Leasing, No Surface Occupancy
- Leasing, Cumulative Timing Limitations on Drilling >9 Months
- Leasing, Cumulative Timing Limitations on Drilling 6-9 Months
- Leasing, Cumulative Timing Limitations on Drilling 3-6 Months
- Leasing, Cumulative Timing Limitations on Drilling <3 Months
- Leasing, Controlled Surface Use
- Leasing, Standard Lease Terms



RESULTS FOR MONTANA THRUST BELT (Montana)

- Area of Federal lands, including split estate: 5.8 million acres
- Of all five inventory areas, this area contains the smallest volume of resources (348 MMbbl of oil and 8.6 Tcf of natural gas).
- A high percentage of the Federal land (82%), 88% of the oil, and 91% of the natural gas are currently closed to leasing.
- The USDA's Forest Service is the primary Federal land manager in the area, responsible for 69% of the area, of which almost half is currently closed to leasing while undergoing new land use planning.

Available for Leasing With Standard Stipulations:

- Area: 0.2 million acres (4% of the basin)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 6 MMbbl of oil (3% of the undiscovered technically recoverable oil in the basin)
 - 0.1 Tcf of natural gas (1% of the reserves and undiscovered technically recoverable natural gas in the basin)

Available for Leasing With Restrictions on Oil and Gas Operations Beyond Standard Stipulations:

- Area: 0.8 million acres (14% of the basin)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 15 MMbbl of oil (9% of the reserves and undiscovered technically recoverable oil in the study area)
 - 0.5 Tcf of natural gas (8% of the reserves and undiscovered technically recoverable natural gas in the study area)

Not Available for Leasing:

- Area: 4.8 million acres (82% of the total study area)
- Estimated reserves and undiscovered technically recoverable oil and gas resources beneath those lands:
 - 149 MMbbl of oil (88% of the reserves and undiscovered technically recoverable oil in the study area)
 - 5.7 Tcf of natural gas (91% of the reserves and undiscovered technically recoverable natural gas in the study area)

Montana Thrust Belt -- Oil and Natural Gas Resources Affected by Access Categories

Level	Access Category	Area		Proved Reserves and Undiscovered Technically Recoverable Resources			
		(acres x1000)	Percent of Federal	Total Liquids* (MMBbl)***	Percent of Federal	Total Natural Gas** (Bcf)****	Percent of Federal
1.	No Leasing (Statutory/Executive Order), (NLS)	2,351	40%	83	49%	3,210	51%
2.	No Leasing (Administrative), (NLA/LUP)	1,846	32%	57	33%	2,269	36%
3.	No Leasing (Administrative), (NLA)	597	10%	9	5%	247	4%
4.	Leasing, No Surface Occupancy (NSO)	340	6%	7	4%	266	4%
5.	Leasing, Cumulative Timing Limitations on Drilling >9 Months (TLs >9)	16	0%	0	0%	6	0%
6.	Leasing, Cumulative Timing Limitations on Drilling 6-9 Months (TLs 6-9)	74	1%	1	1%	45	1%
7.	Leasing, Cumulative Timing Limitations on Drilling 3-6 Months (TLs 3-6)	124	2%	3	2%	72	1%
8.	Leasing, Cumulative Timing Limitations on Drilling <3 Months (TLs <3)	69	1%	1	0%	29	0%
9.	Leasing, Controlled Surface Use (CSU)	203	3%	4	2%	99	2%
10.	Leasing, Standard Lease Terms (SLTs)	230	4%	6	3%	52	1%
Total, Federal Lands Including Split Estate		5,849	100%	170	100%	6,294	100%
Total Non-Federal		5,829		179		2,344	
Total Study Area		11,678		348		8,638	

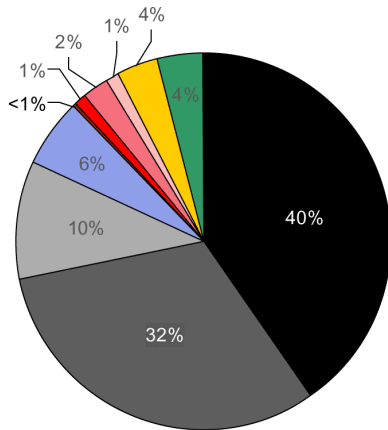
* Comprising oil, NGLs and liquids associated with natural gas reservoirs

** Comprising associated dissolved and nonassociated natural gas

***MMBbl -- Millions of Barrels

****Bcf -- Billion cubic feet

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